

**ABSTRACT**

[0090] The present invention provides allosteric probes and methods of using allosteric probes for binding a first target and at least a second target. The probes have an allosteric molecule and at least one regulated aptamer. The binding of the allosteric molecule to a first target enhances or inhibits the binding of the at least one regulated aptamer to at least a second target. The binding of the at least one regulated aptamer to its target can be used to detect the presence of a particular target or targets or to selectively target a prodrug, drug, or toxin to a target cell or group of cells. The allosteric probes have a wide variety of diagnostic and therapeutic applications.